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Technical Management Techniques for Identification and Control of Industrial Safety and Pollution Hazards

Enterprises that utilize Earth's resources, and which are interested in identifying and controlling product or process liability risks, may discover unique applications from space engineering and management techniques. A report prepared for the Geological Survey by a team of National Aeronautics and Space Administration experts examines the feasibility of applying to offshore oil and gas operations advanced systems engineering techniques designed to increase the reliability of safety and anti-pollution equipment.

While quality control, failure mode effects analysis, and hazard analysis procedures are not unique to the aerospace industry, techniques to assure the functional reliability of complex hardware systems were brought to a state of high perfection by NASA in their space program. Through the cooperation of NASA and of industries operating on the Outer Continental Shelf, it has been possible for technical experts from NASA's staff to study first-hand offshore oil and gas facilities and operations. These experienced engineers and technicians present in this report their preliminary recommendations for action by the Federal Government and the oil industry to provide greater assurance that offshore energy resources can be produced with reasonable safety and protection from pollution of the marine and coastal environment.

The report offers constructive recommendations for dealing with the problems which have been associated

with the recent pollution on the Outer Continental Shelf.

Notes:

1. The following documentation may be obtained from:
National Technical Information Service
Springfield, Virginia 22151
Single document price \$3.00
(or microfiche \$0.95)

Reference: NASA TMX-2567 (N72-25955), Applicability of NASA Contract Quality Management and Failure Mode Effect Analysis Procedures to the USGS Outer Continental Shelf Oil and Gas Lease Management Program

2. Requests for further information may be directed to:
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